COMPACT DISC PLAYER

DP-1001

SERVICE MANUAL

KENWOOD

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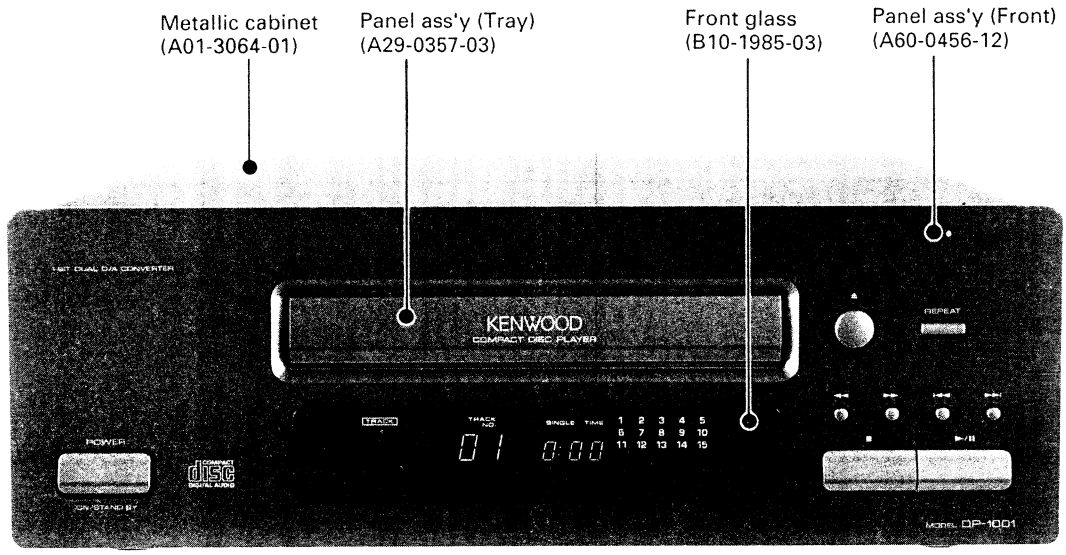
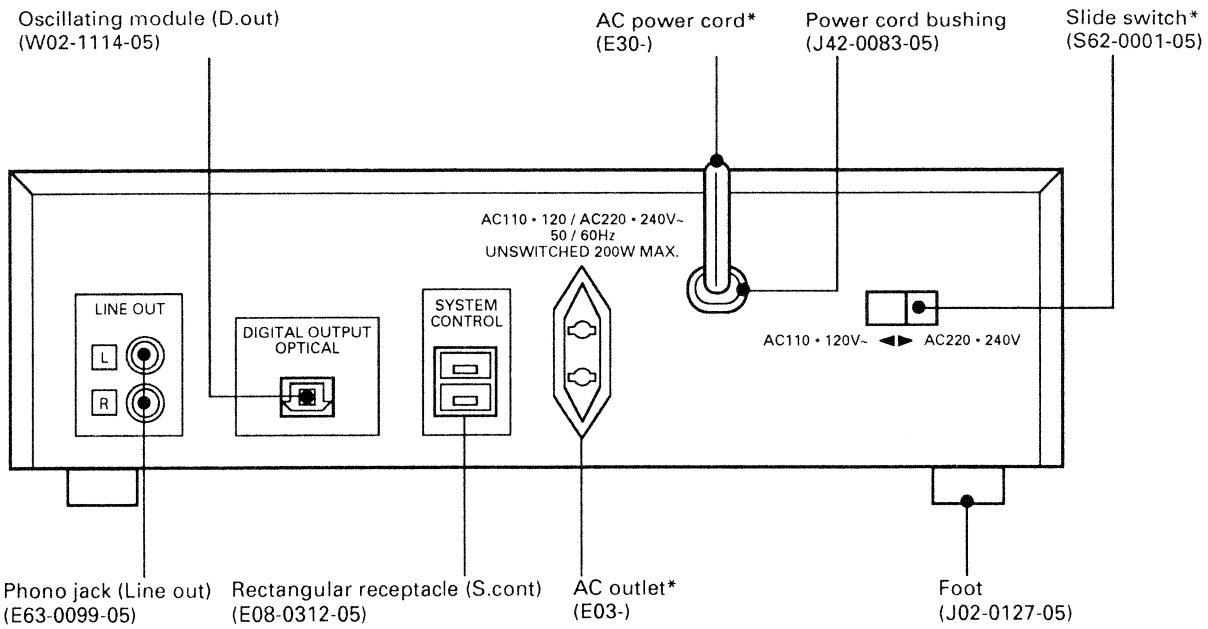
B51-4765-00 (O) 389





In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

KENWOOD-Corp. certifies this equipment conforms to DHHS Regulations No. 21 CFR 1040. 10, Chapter 1, Subchapter J.

DANGER : Laser radiation when open and interlock defeated. AVOID DIRECT EXPOSURE TO BEAM.

*** Refer to parts list on page 25.**

Refer to DP-A5/A9 service manual (B51-4586-00), if need description in detail.

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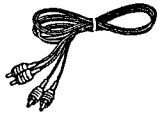
Refer to DP-A5/A9 service manual (B51-4586-00), if need description in detail.

ACCESSORIES

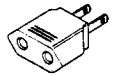
Speaker cord is packed with LS-1001.
Remote control unit and Battery are packed with A-1001.
Other accessory are packed with DP-1001.

- System control cord (E30-2628-05) 1

- Audio cord (E30-2749-05) 1

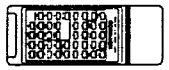


- AC plug adaptor (E03-0115-05) : M type only 1

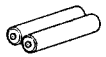


(Except for some areas)
For the unit with a European AC plug in areas other than Europe.

- Remote control unit (A70-0939-05) 1



- Battery (AAA/R03) (–) 2

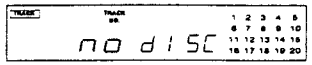


Battery cover (A09-0149-08)

Note related to transportation and movement

Befor transporting or moving this unit, carry out the following operations.

1. Turn the power ON, but do not load a disc.
2. Wait a few seconds and verify that the display shown appears.
3. Turn the power OFF.



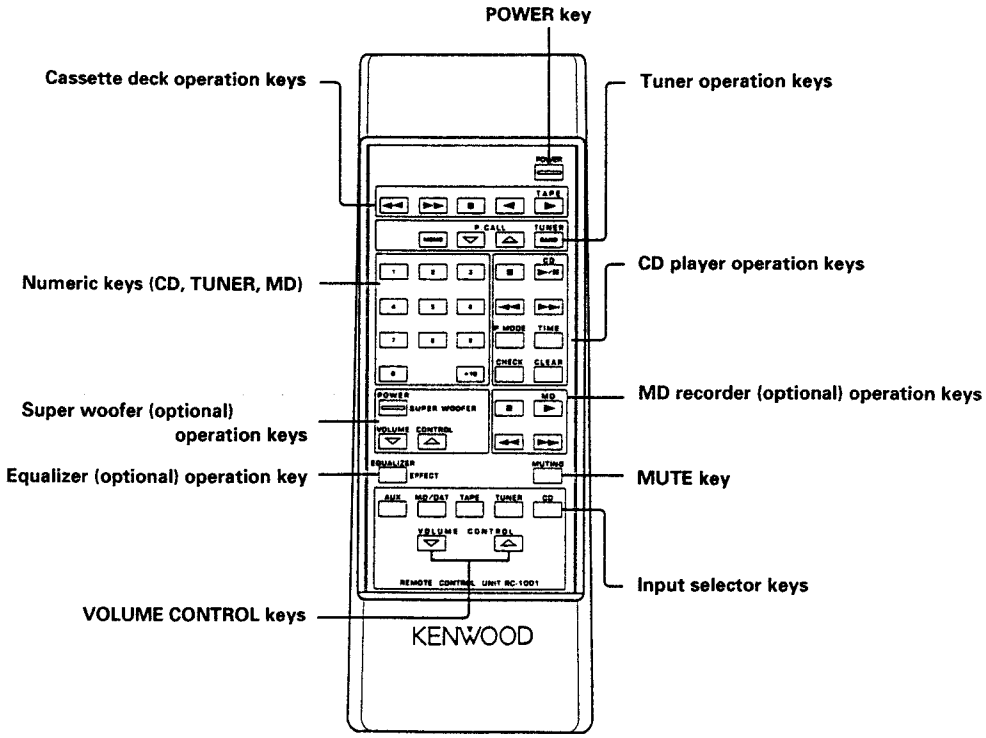
SYSTEM NAME	AMPLIFIER	TUNER	DECK	CD PLAYER	SPEAKER*
HD-1000	A-1001	T-1001/1001L	X-1001	DP-1001	LS-1001

OPTION	EQUALIZER	MD RECORDER
	GE-1001	DM-1001

*Except for some areas.

REMOTE CONTROL OPERATION

- When the amplifier is connected with the T-1001 tuner, DP-1001 CD player, X-1001 cassette deck, GE-1001 equalizer and DM-1001 MD recorder through system control cords, these components can be operated from the remote control unit provided with the amplifier. For the functions of the keys, refer to the instruction manuals of the components.

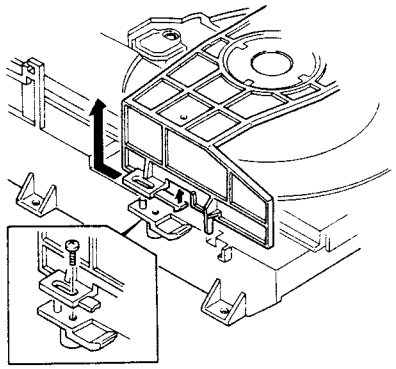


Model: RC-1001
Infrared ray system

DISASSEMBLY FOR REPAIR

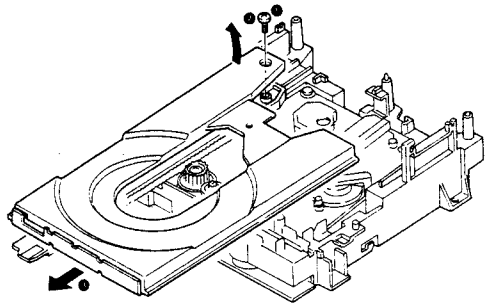
1. How to Remove Clamper

1. Remove the cabinet.
2. Remove both-sides-catchers of clamper ass'y and slide it backwards.
3. Lift the clamper ass'y.



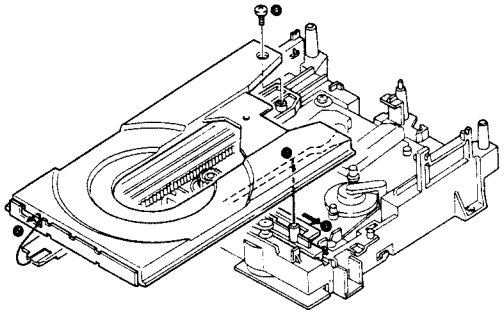
2. How to Remove Tray

1. Turn power switch off after tray is open.
2. Remove screw (❶).
3. Lift the tray (❷).
4. Slide the tray frontwards and remove it (❸).



3. How to Mount Tray

1. Slide slider fully rightwards and pull out tray gear frontwards (❶).
2. Insert tray gear in slit of tray (❷).
3. Set tray-back-groove to boss of slider (❸).
4. Fix tray with screw (❹).



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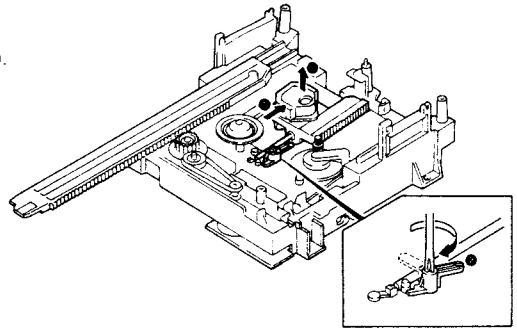
DISASSEMBLY FOR REPAIR

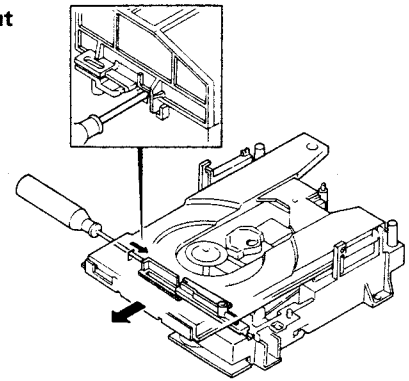
4. How to Replace Pickup

1. Remove clamper ass'y and set tray-open.
2. Move pickup at center position of its all travel (❶).
3. Turn rod stopper (❷) and lift pickup ass'y (❸).



5. How to Open Tray when Tray Not Come Out

1. Insert screw driver to left-side hole of mechanism ass'y.
2. Push slider rightwards.



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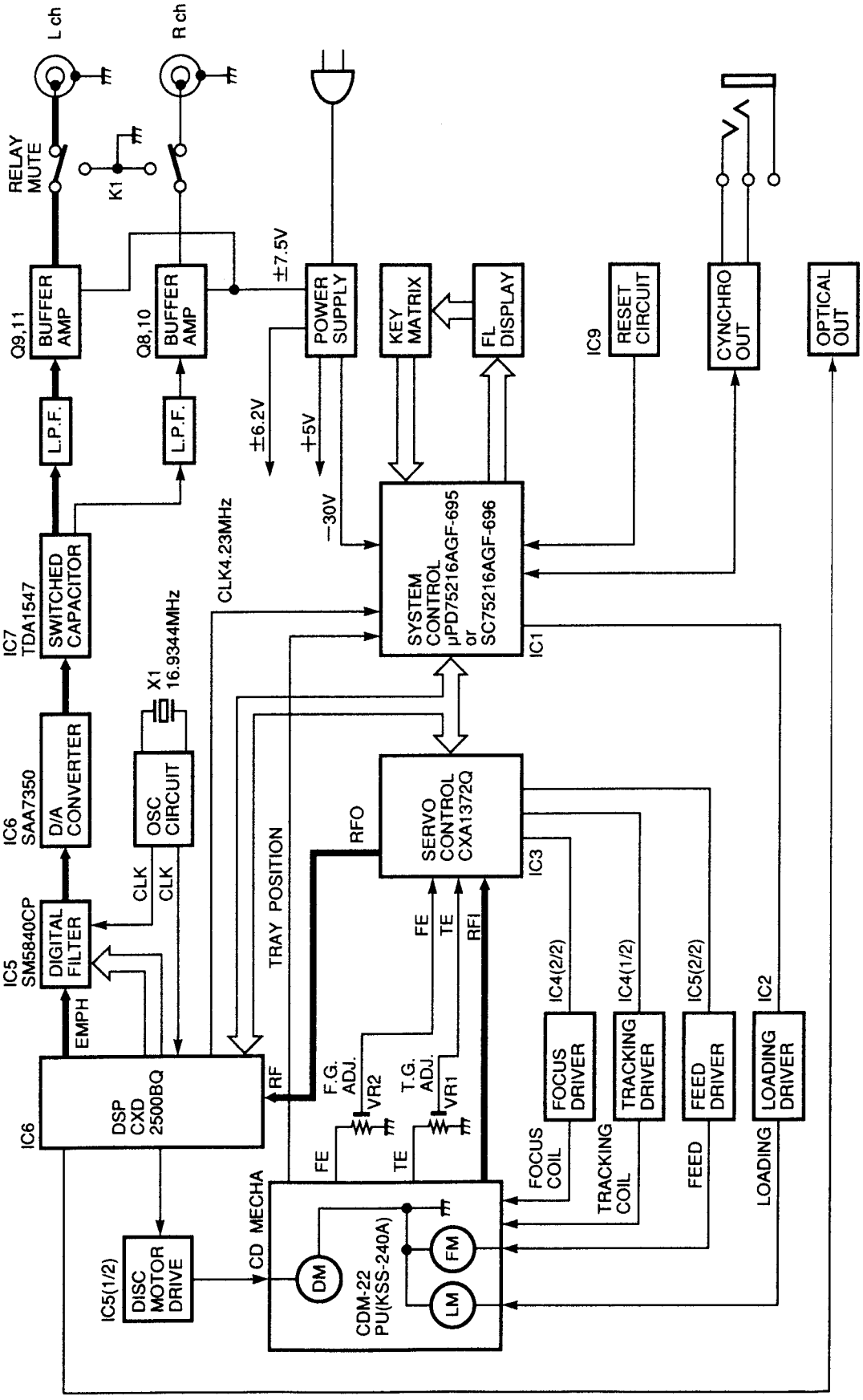
BLOCK DIAGRAM

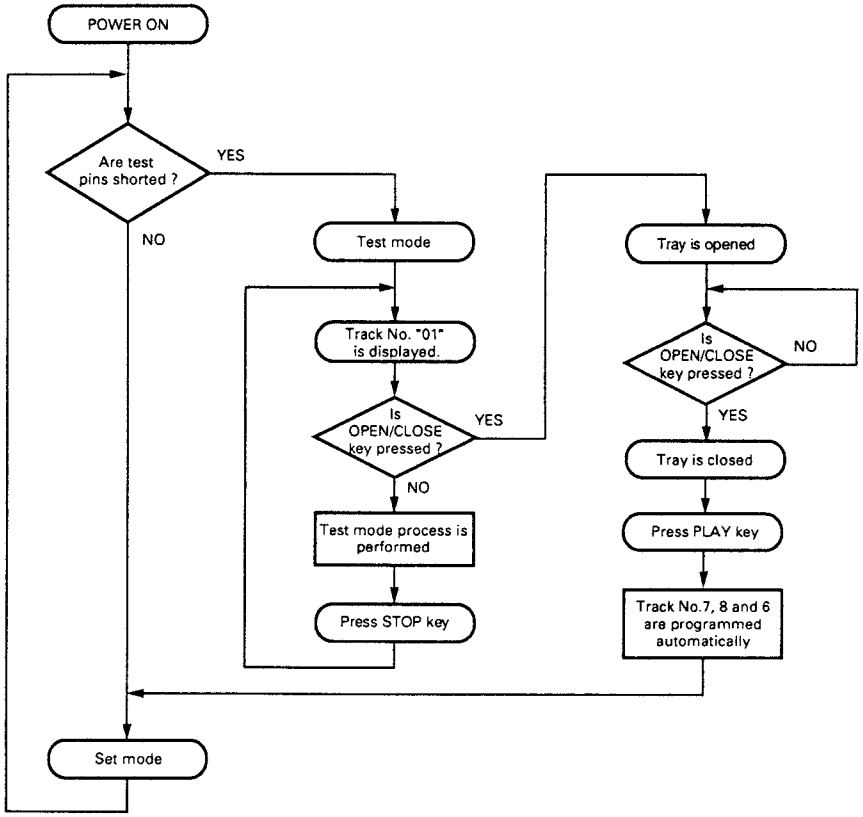


CIRCUIT DESCRIPTION

1. Test mode

1-1. Setting the test mode

This microprocessor built in this unit can be put to Test Mode by just short-circuiting the test pins (X32-). The Test Mode can be also initiated with short-circuiting the test pins when tray is OPEN. If unit is in test mode, TRACK No. displays "05".



CIRCUIT DESCRIPTION

1-2. Key and functions valid test mode

No.	Input key	Function	Track No. display
1	PLAY	(1) Focusing servo ..... ON (2) Tracking servo ..... ON (3) Feed servo ..... ON	TRACK NO. 05 ↓ Displayed for a few seconds after completion (1), (2) and (3). ↓ Disc Track No. is displayed.
2	STOP	(1) Focusing servo ..... OFF (2) Tracking servo ..... OFF (3) Feed servo ..... OFF	TRACK NO. 01
3	(▶▶)	In the STOP mode, moves the pickup slightly toward the outer position of disc. When feed servo is ON, sets the track gain to "H".	-
4	(◀◀)	In the STOP mode, moves the pickup slightly toward the inner position of disc. When feed servo is ON, sets the track gain to "L".	-
5	UP (▶▶|)	Turns all FL display lamps ON.	TRACK NO. 88
6	DOWN (|◀◀)	Turns all FL display lamps OFF, "TRACK NO." is lighted.	TRACK NO. 88
7	OPEN / CLOSE	When the tray is opened then closed in test mode. Track No. 7, 8 and 6 are programmed and set is in STOP mode. The test mode is canceled.	TRACK NO. 00
8	*REPEAT	(1) Tray ..... Opened (2) Laser ..... ON The REPEAT function is canceled when the tray is closed by pressing the tray. "REPEAT" figures is lighted.	TRACK NO. 02

*REPEAT mode : Press "REPEAT" key→Press "OPEN/CLOSE" key→Press "REPEAT" key....

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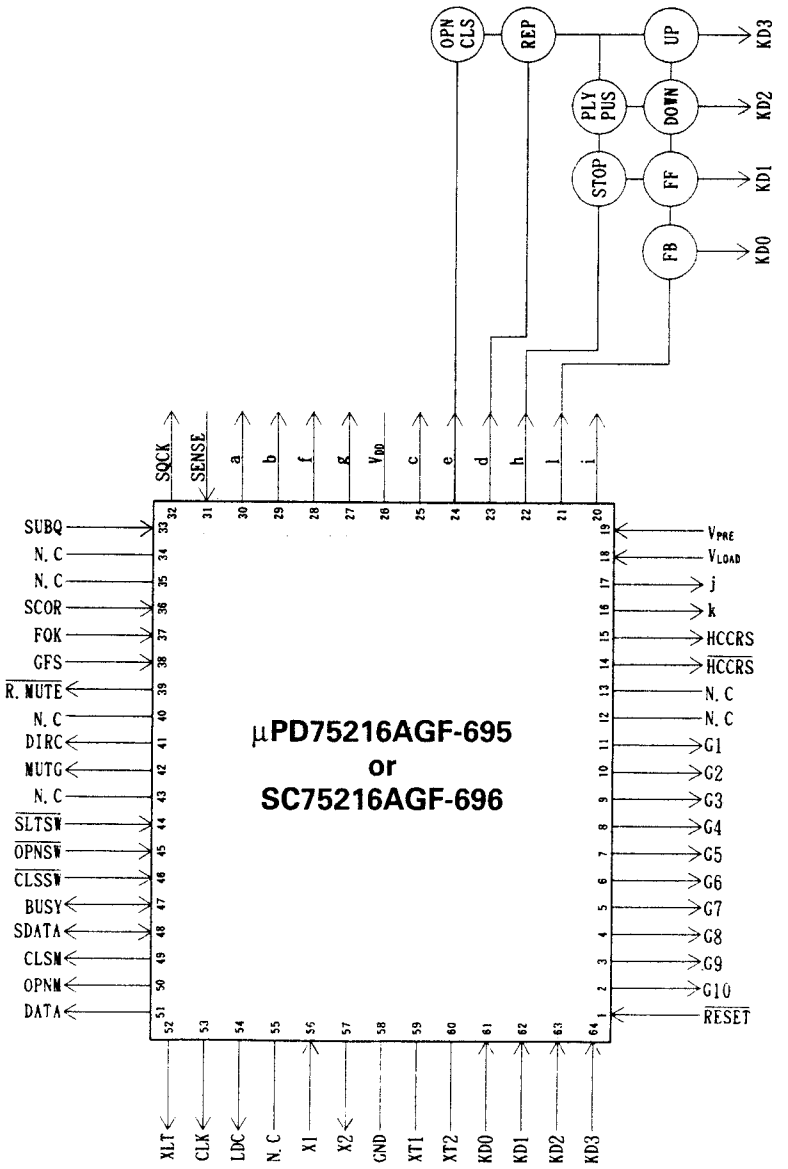
CIRCUIT DESCRIPTION

2. Microprocessor : μPD75216AGF-695 or SC75216AGF-696 (X32-, IC1)

2-1. Pin connection



CIRCUIT DESCRIPTION

2-2. Pin function

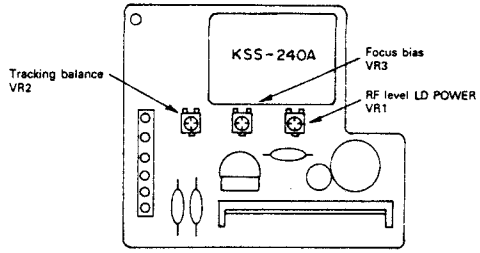
Port	Name	I/O	Description
1	RESET	I	Reset input port (Active L)
2 ~ 11	10G ~ 1G	O	FL grid control port
12, 13	N.C	O	Not used
14	HCCRS	O	High-speed control port (Active L)
15	HCCRS	O	High-speed control port (Active H)
16, 17	k, j	O	FL segment control port
18	VLOAD	I	FL driver negative power supply
19	VPRE	I	FL predriver power supply
20	i	O	FL segment control port
21 ~ 25	l, h, d, e, c	O	FL segment control port/also used for key-scan
26	VDD	-	+5V power supply
27 ~ 30	g, f, b, a	O	FL segment control port/also used for key-scan
31	SENSE	I	Signal detection port for SENSE signal from signal processor and servo IC
32	SQCK	O	Q-data read clock output port
33	SUBQ	I	Q-data input port
34, 35	N.C	O	Not used
36	SCOR	I	Sub-code frame sync detection signal input port
37	FOK	I	Input port of FOK signal from RF amp
38	GFS	I	Input port of frame sync signal
39	RMUTE	O	Analog mute control port (MUTE ON : "L")
40	N.C	O	Not used

Port	Name	I/O	Description
41	DIRC	O	DIRC control port of servo IC
42	MUTG	O	Mute port of signal processor (MUTE ON : "H")
43	N.C	O	Not used
44	SLTSW	I	Input port of Start Limit Switch (ON : "L")
45	OPNSW	I	input port of Tray Open Switch (ON : "L")
46	CLSSW	I	Input port of Tray Close Switch (ON : "L")
47	BUSY	I/O	Serial BUSY in/out port
48	SDATA	I/O	Serial DATA in/out port
49	CLSM	O	Tray close signal for motor port
50	OPNM	O	Tray open signal for motor port
51	DATA	O	Signal processor and servo IC control out port (DATA)
52	XLT	O	Signal processor and servo IC control out port (LATCH)
53	CLK	O	Signal processor and servo IC control out port (CLOCK)
54	LDC	O	Laser ON/OFF signal out port
55	N.C	O	Not used
56	X1	I	Oscillation input port (4.19MHz)
57	X2	O	Oscillation out port
58	Vss	-	GND
59	XT1	-	GND
60	XT2	-	Open
61 ~ 64	KD0 ~ 3	I	Key input port

ADJUSTMENT

CAUTION

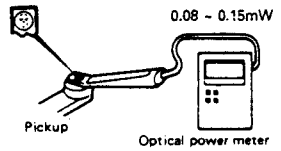
Pickup (KSS-240A) is adjustment free in repairing, please don't disassemble and adjust it.



No.	ITEM	INPUT SETTING	OUTPUT SETTING	PLAYER SETTING	ALIGNMENT POINT	ALIGN FOR	FIG.
1	LASER POWER	-	Apply the sensor section of the optical power meter on the pickup lens.	Short-circuit patterns TEST and enter the test mode. Press the MANUAL S (⏩) to move the pickup outwards. Short-circuit patterns CHECK. The LD emets light Then, confirm that the display is "03" (X32-)	-	On the power from 0.08 to 0.15mW, when the diffraction grating is correctly a ligned with the RF level of 1.5Vp-p or more and the TE (servo open) level of 1.5Vp-p or more, the pickup is acceptable.	(a)
2	FOCUS GAIN	Test disc Type 4 Apply signal of 1.0kHz, 0.1Vrms to CN5 pin 2 and 3. (X32-)	Connect a LPF to CN5 pin 2-3, to which connect an oscilloscope or two AC voltmeters. (X32-)	Press the PLAY key Confirm that the display is "05". (X32-)	FOCUS GAIN VR2 (X32-)	Two VTVMs should read the same value.	(b)
3	TRACKING GAIN	Test disc Type 4 Apply signal of 1.0kHz, 0.1Vrms to CN5 pin 5 and 6. (X32-)	Connect a LPF to CN5 pin 5-6, to which connect an oscilloscope or two AC voltmeters. (X32-)	Press the PLAY key Confirm that the display is "05". (X32-)	TRACKING GAIN VR1 (X32-)	Two VTVMs should read the same value.	(c)

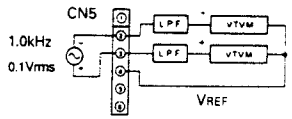
(NOTE) Type 4 disc : SONY YEDS-18 TEST DISC or equivalent.
LPF: around 47kohms-390pF or so.

(a) Laser Power

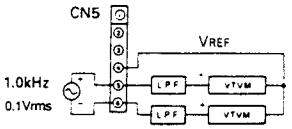


(b) Focus Gain, (c) Tracking Gein

Focus gain :



Tracking gain :



ADJUSTMENT

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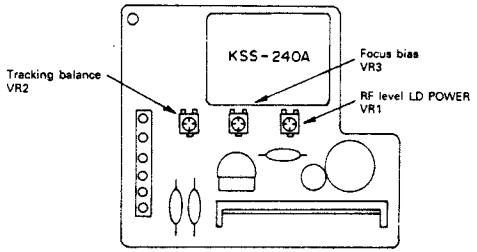

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(NOTE) Type 4 disc : SONY VEDS-18 TEST DISC or equivalent.
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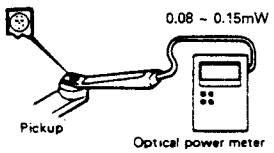
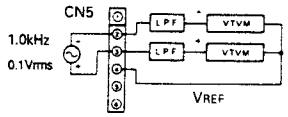
(a) Laser Power

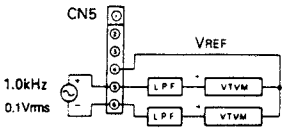


(b) Focus Gain, (c) Tracking Gein

Focus gain :



Tracking gain :



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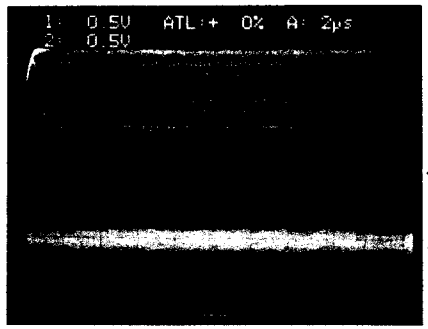
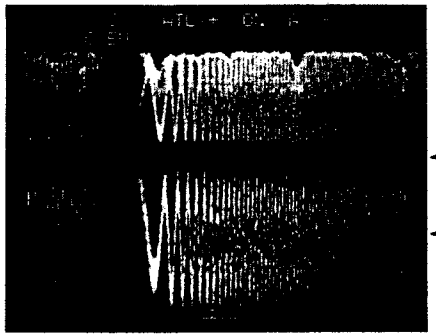
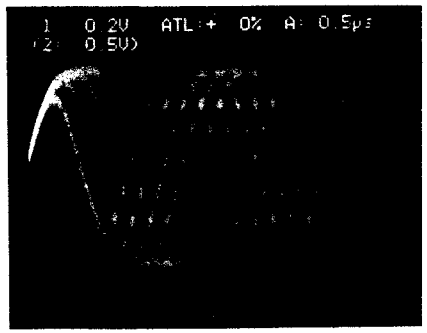
ADJUSTMENT



- RF signal and E.Spot signal in test mode (PLAY).
- If the diffraction grating has been adjusted properly, the influence of triggering is observed on the E.Spot waveform of appox. 16μs after RF signal, in the form of a projection.

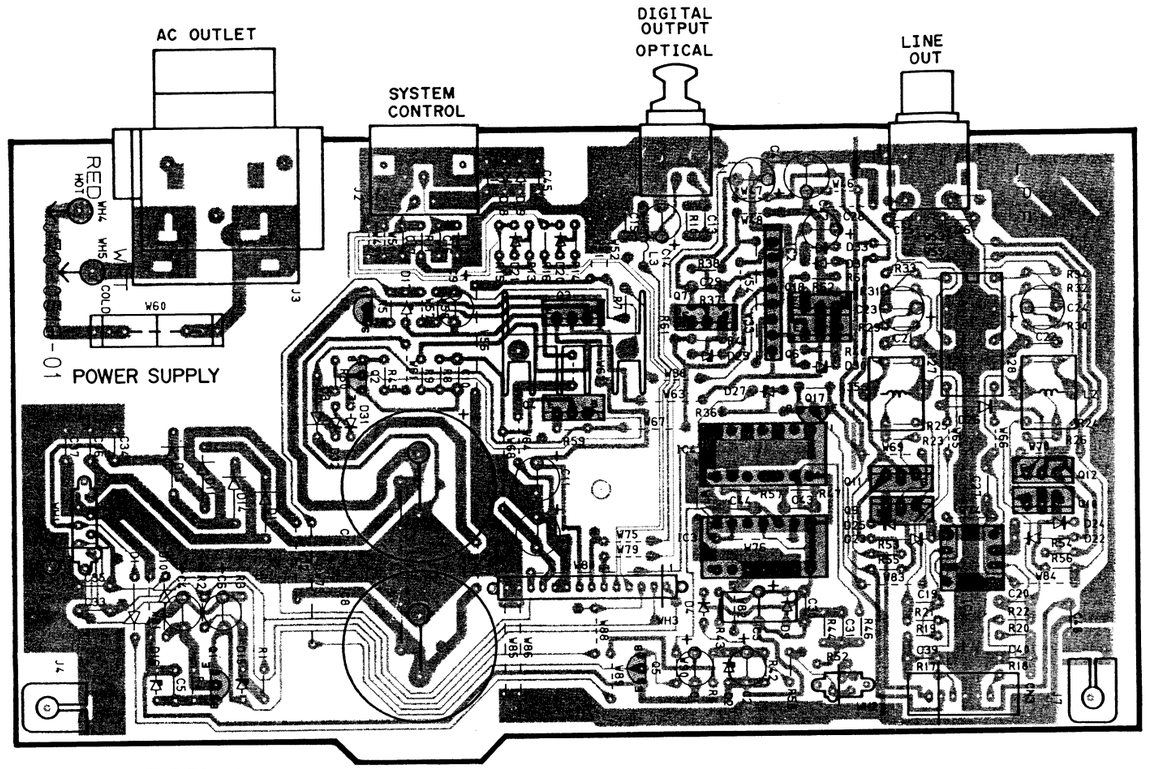


- RF signal and T.Error signal; in test mode (Focusing ON). (Disc type 4)

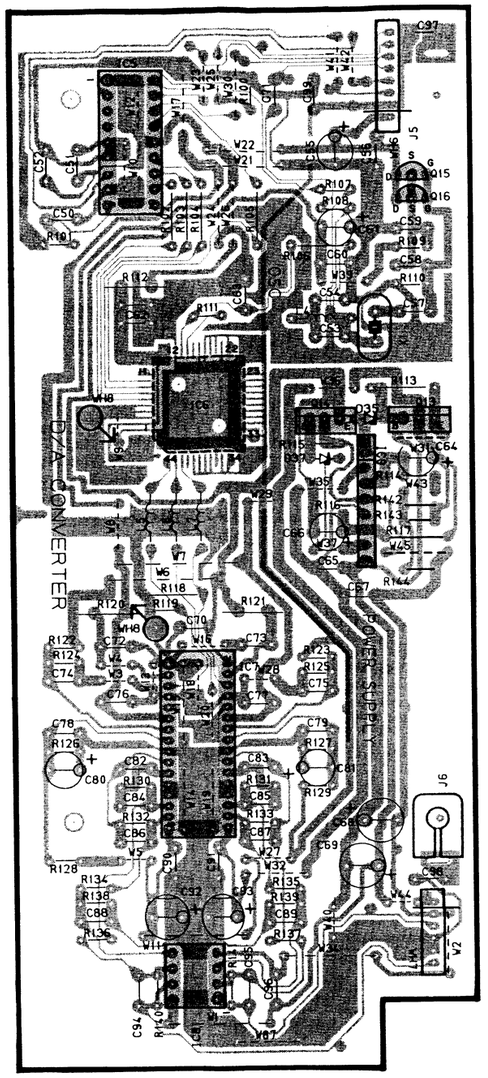


- RF signal in test mode (PLAY).

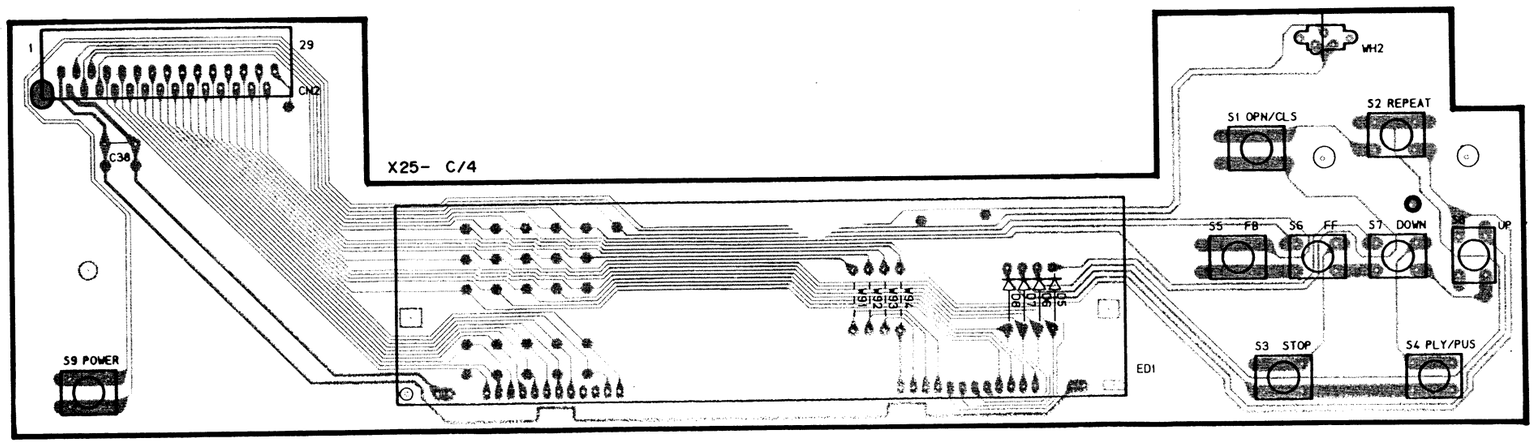
PC BOARD (COMPONENT SIDE VIEW)



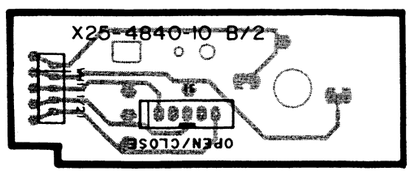
X25-548X-XX (0-21 : M, 0-51 : T, 2-71 : E) (A/4)

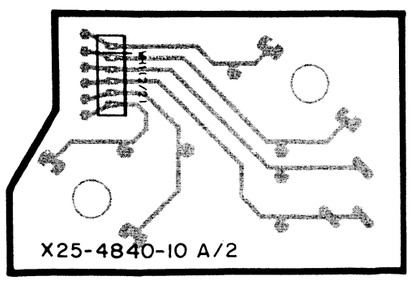


X25- B/4



X25- C/4





FRONT

Refer to the schematic diagram for the values of resistors and capacitors.

(X25-548X-XX)(B/4)

X32-CN1 1/2 (A)

X32-CN2,7 1/2 (B)

X32-CN6 1/2 (C)

WH6: +5V, GND, RST, ENPH, 16MHz, LRCK, BCLK, DATA

J5

IC5 — 8fs DIGITAL FILTER

IC6 (Bottom View) PDM CONVERTER

MASTER CLOCK — X1 16.9344MHz

IC9 (1/2) +5V AVR — Q13, D35

IC9 (2/2) -5V AVR — Q14, D37

D/A CONVERTER — IC7

(X25-)(A/4)

WH3: F1, F2, VLOAD, SDATA, BUSY, D.OUT, +5V, +B, GND, GND, -B, R-MUTE, GND, GND

CN3: +B, -B, L ch, GND, Rch

IC1 (1/2) L.P.F. — IC1 (2/2) L.P.F.

MUTING CONTROL — K1

+6.8V AVR — Q18, Q6, IC2 (2/2)

-6.8V AVR — IC2 (1/2), Q7

-30V AVR — Q1, D15

POWER CONTROL — Q3, Q5, Q8, IC4, IC3

-6.8V AVR — Q2, Q4

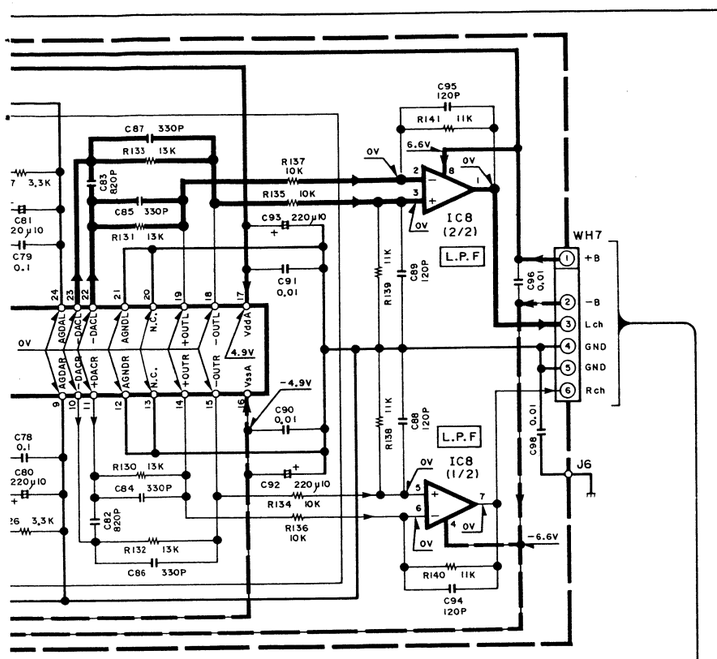
J7 L ch R ch AUDIO OUTPUT

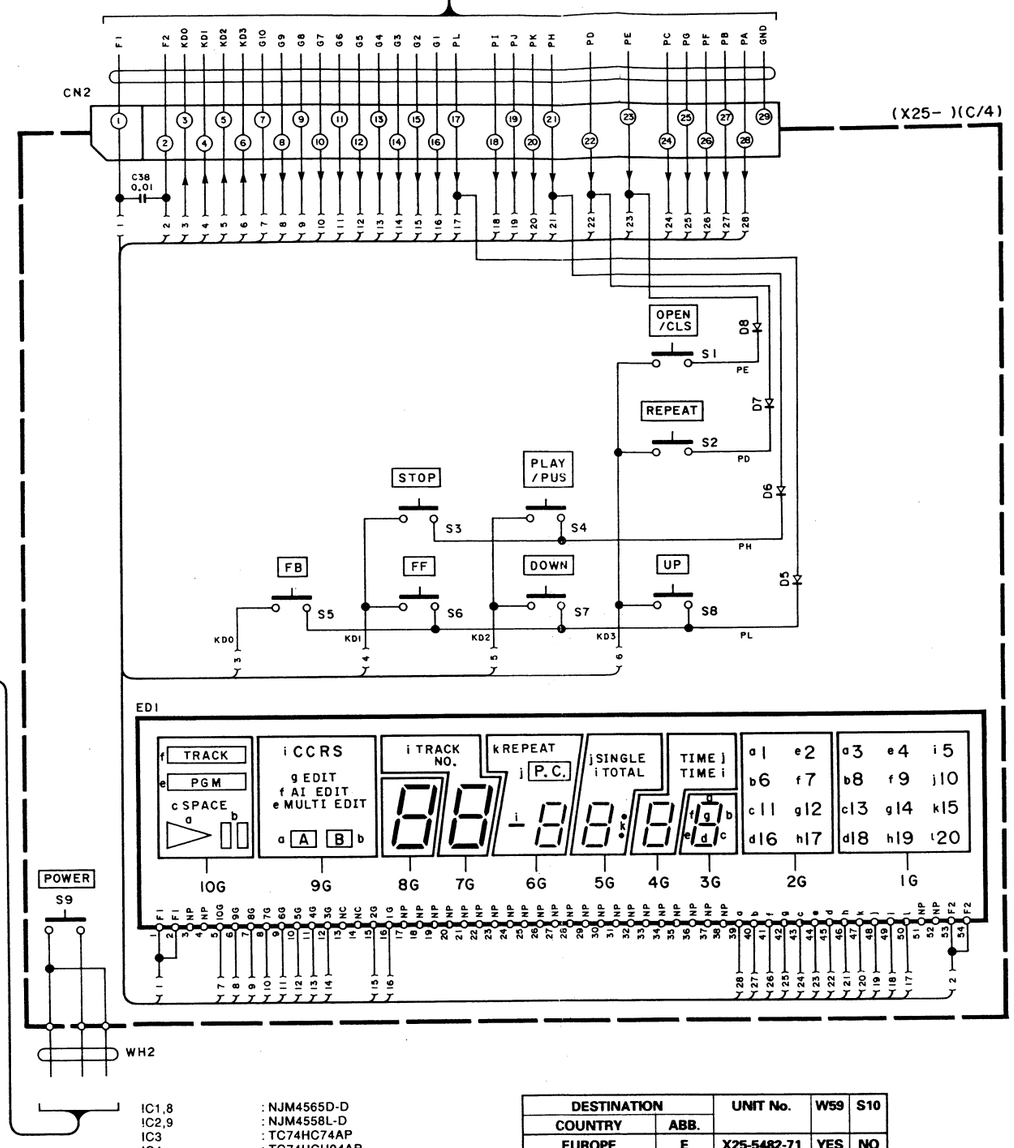
J1

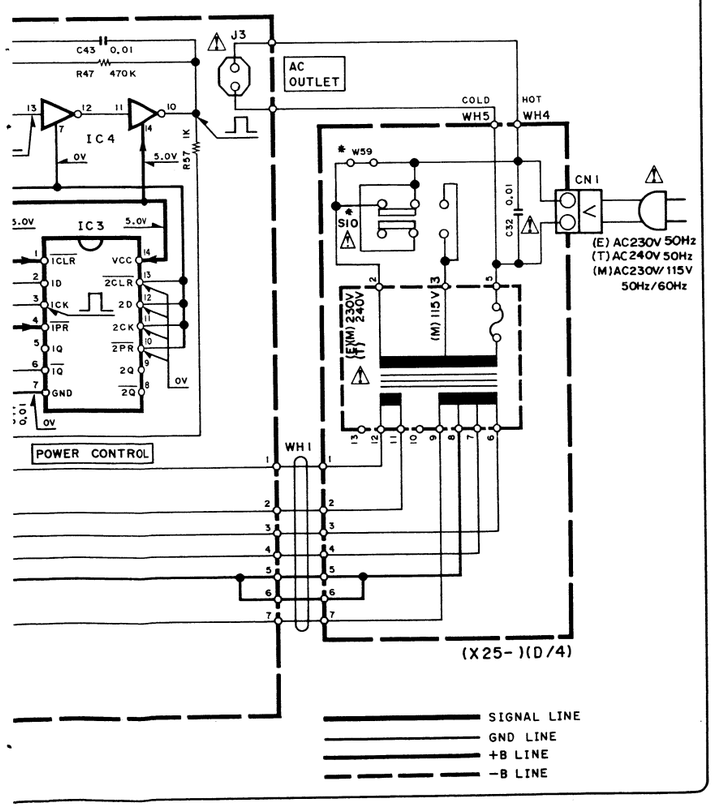
J2 GND SDATA BUSY SHIELD SYSTEM CONTROL 16BIT XS

A1 D.OUT VCC GND DIGITAL OUT OPT

J4





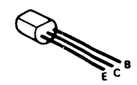


IC1,8	: NJM4565D-D
IC2,9	: NJM4558L-D
IC3	: TC74HC74AP
IC4	: TC74HCU04AP
IC5	: SM5840CP
IC6	: SAA7350
IC7	: TDA1547
Q1	: 2SA954(L,K)
Q2	: 2SA1309A(Q,R) or 2SA1048(Y,GR)
Q3,4,6,7,18	: 2SD1944
Q5	: UN4212 or DTC124ES
Q8	: 2SK246(Y,GR)
Q9,10	: 2SB1375
Q11,12	: 2SD2012
Q17	: 2SC2003(L,K)
Q13	: 2SB1375
Q14	: 2SB1548 or 2SB1370
Q15,16	: 2SK161(Y,GR)
D1,3,10~14	: 1SR139-100 or S5688B
D2	: RD5.6ES(B) or HZS5.6N(B)
D4,9,18~25,31~34	: 1SS133 or HSS104
D5~8,26	: 1SS131 or HSS104A
D15,17,27,29,30	: RD6.8ES(B2) or HZS6.8N(B2)
D16	: RD30ES(B) or HZS30N(B)
D35,37	: RD5.1JS(B2) or HZS5.1S(B2)
ED1	: 10-BT-67GSK

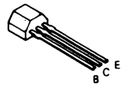
DESTINATION		UNIT No.	W59	S10
COUNTRY	ABB.			
EUROPE	E	X25-5482-71	YES	NO
U.K.	T	X25-5480-51	YES	NO
GENERAL MARKET	M	X25-5480-21	NO	YES

DP-1001 (2/2)

2SA954
2SC2003

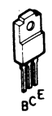


DTC124ES
2SA1048

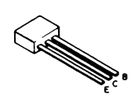


DTC124EK

2SB1370
2SD1944

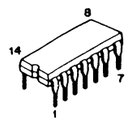


UN4212
2SA1309A

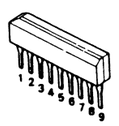


2SB1375
2SB1548
2SD2012

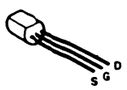
TC74HCU04AP
TC74HC74AP



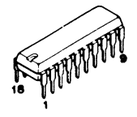
NJM4558L-D



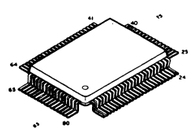
2SK246



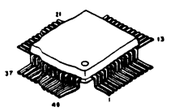
SM5840CP



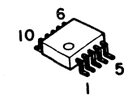
CXD2500BQ



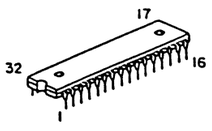
CXA1372Q



TA8409F



TDA1547



M5237ML

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

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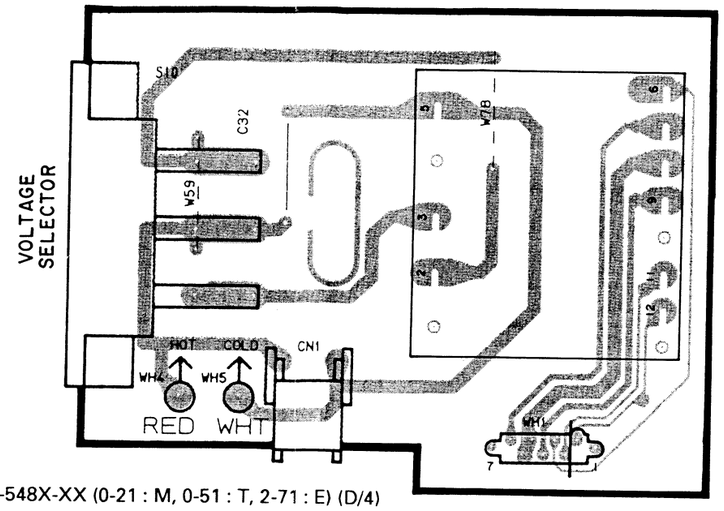
Y22-3402-72

DP-1001
KENWOOD

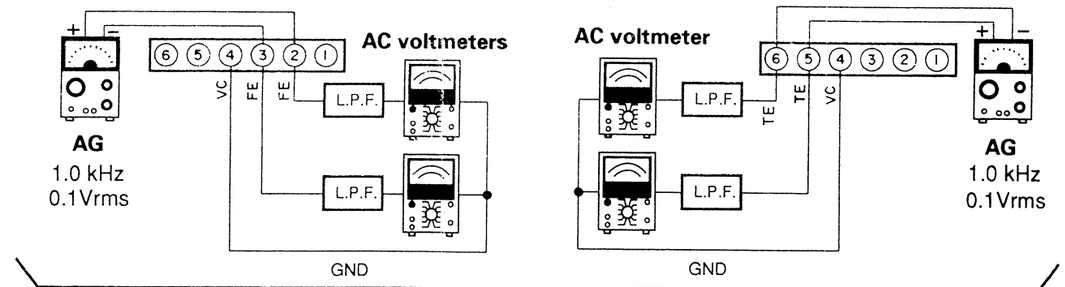
PC BOARD (COMPONENT SIDE VIEW)

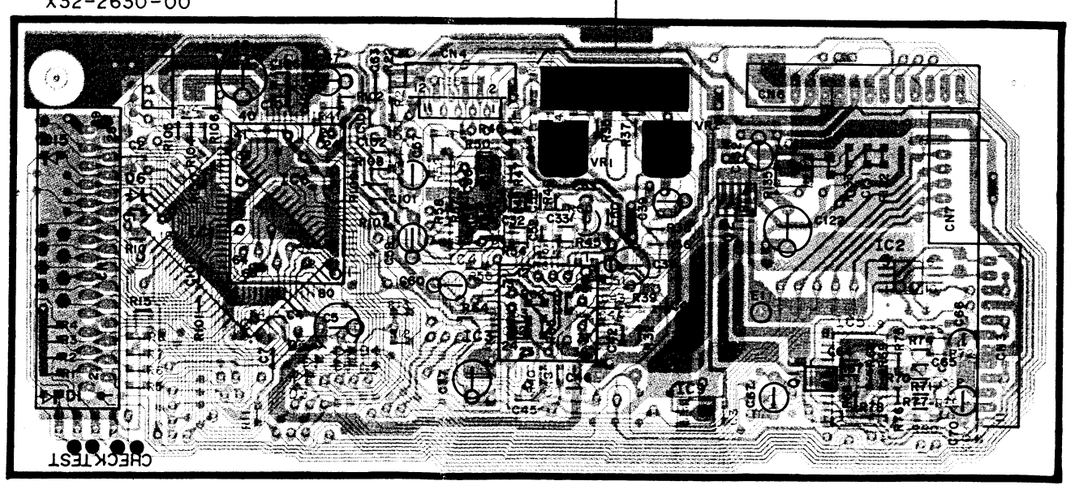


X25-548X-XX (0-21 : M, 0-51 : T, 2-71 : E) (D/4)

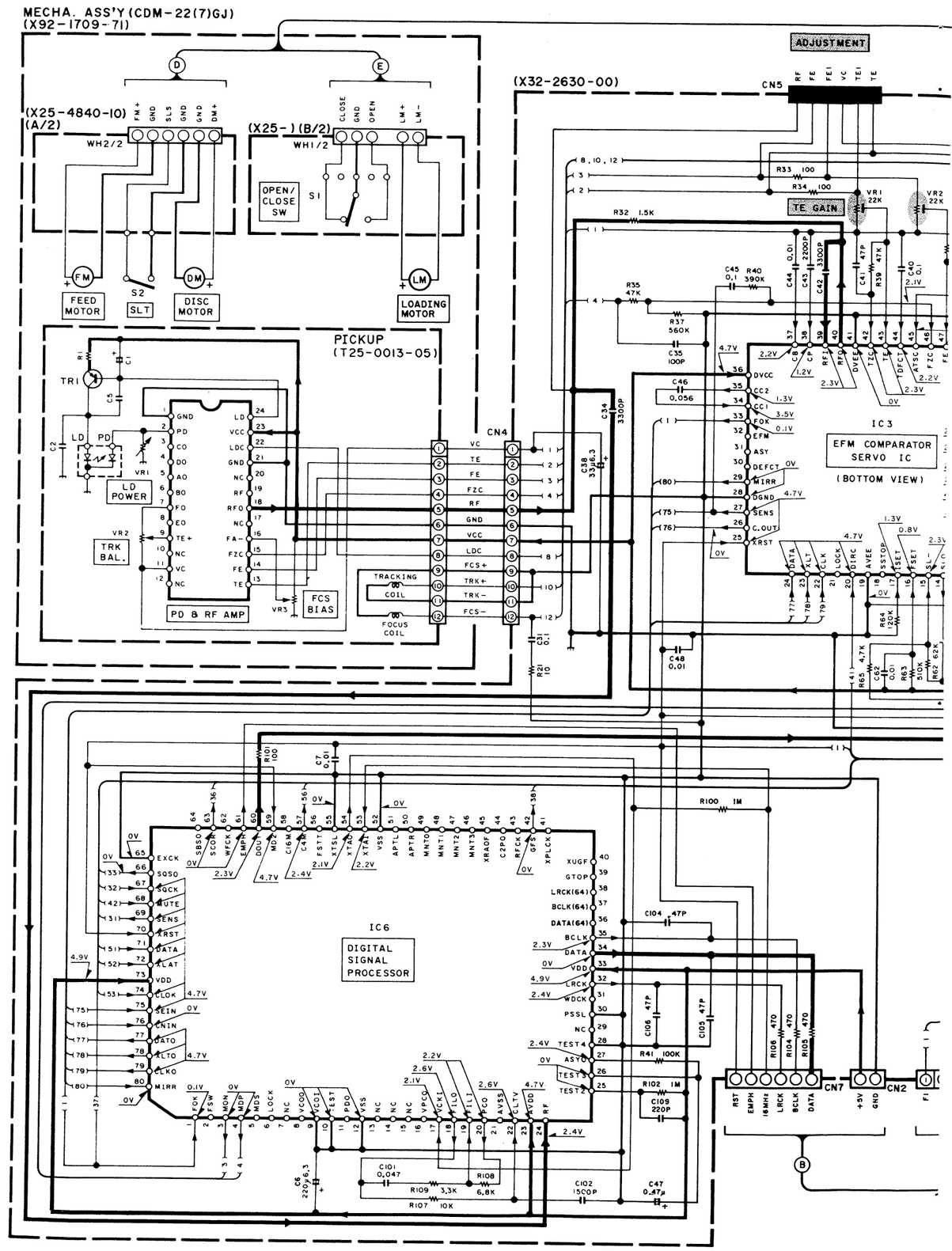
(b) FOCUS GAIN :
Two VTVMs should read the same value.

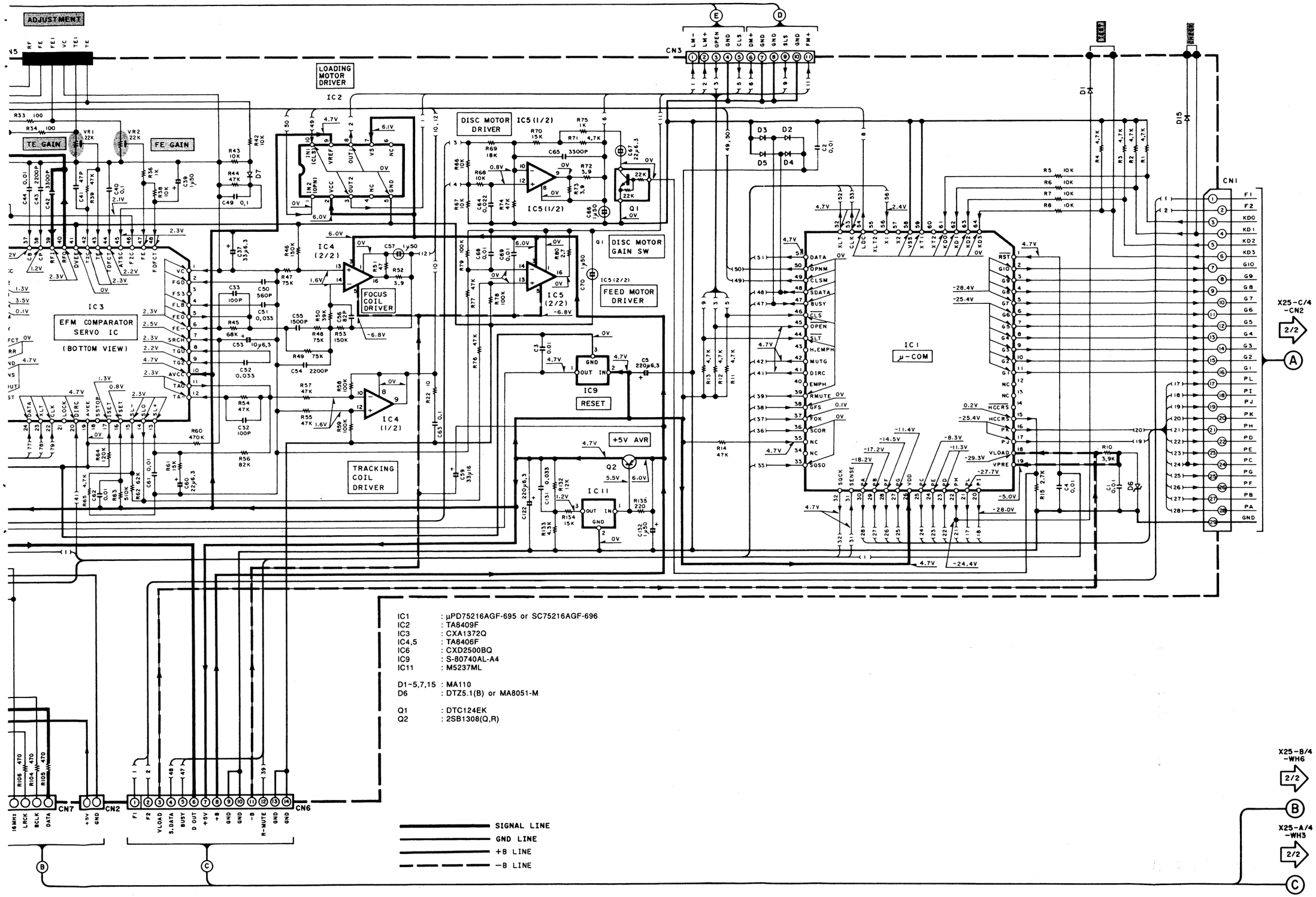
(c) TRACKING GAIN :
Two VTVMs should read the same value.





Refer to the schematic diagram for the values of resistors and capacitors.



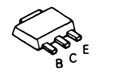


IC1 : μPD75216AGF-695 or SC75216AGF-696
IC2 : TA8409F
IC3 : CXA1372Q
IC4,5 : TA8406F
IC6 : CXD2500BQ
IC9 : S-80740AL-A4
IC11 : M5237ML

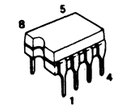
D1~5,7,15 : MA110
D6 : DTZ5.1(B) or MA8051-M

Q1 : DTC124EK
Q2 : 2SB1308(Q,R)

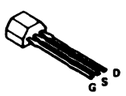
2SB1308



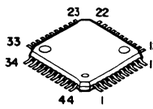
NJM4565D-D



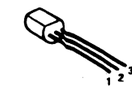
2SK161



SAA7350



S-80740AL-A4



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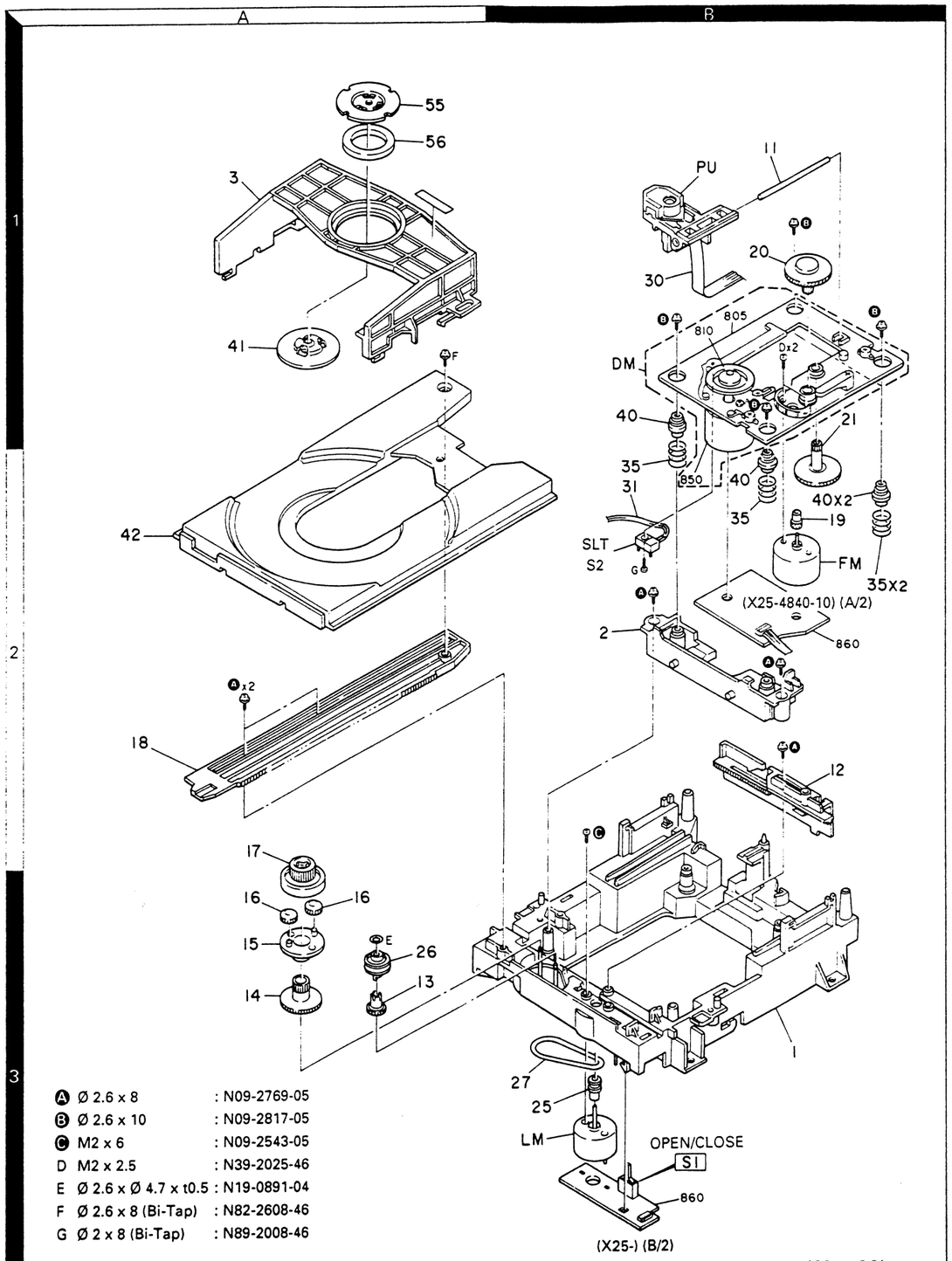
DP-1001 (1/2)

Y22-3402-72

DP-1001
KENWOOD

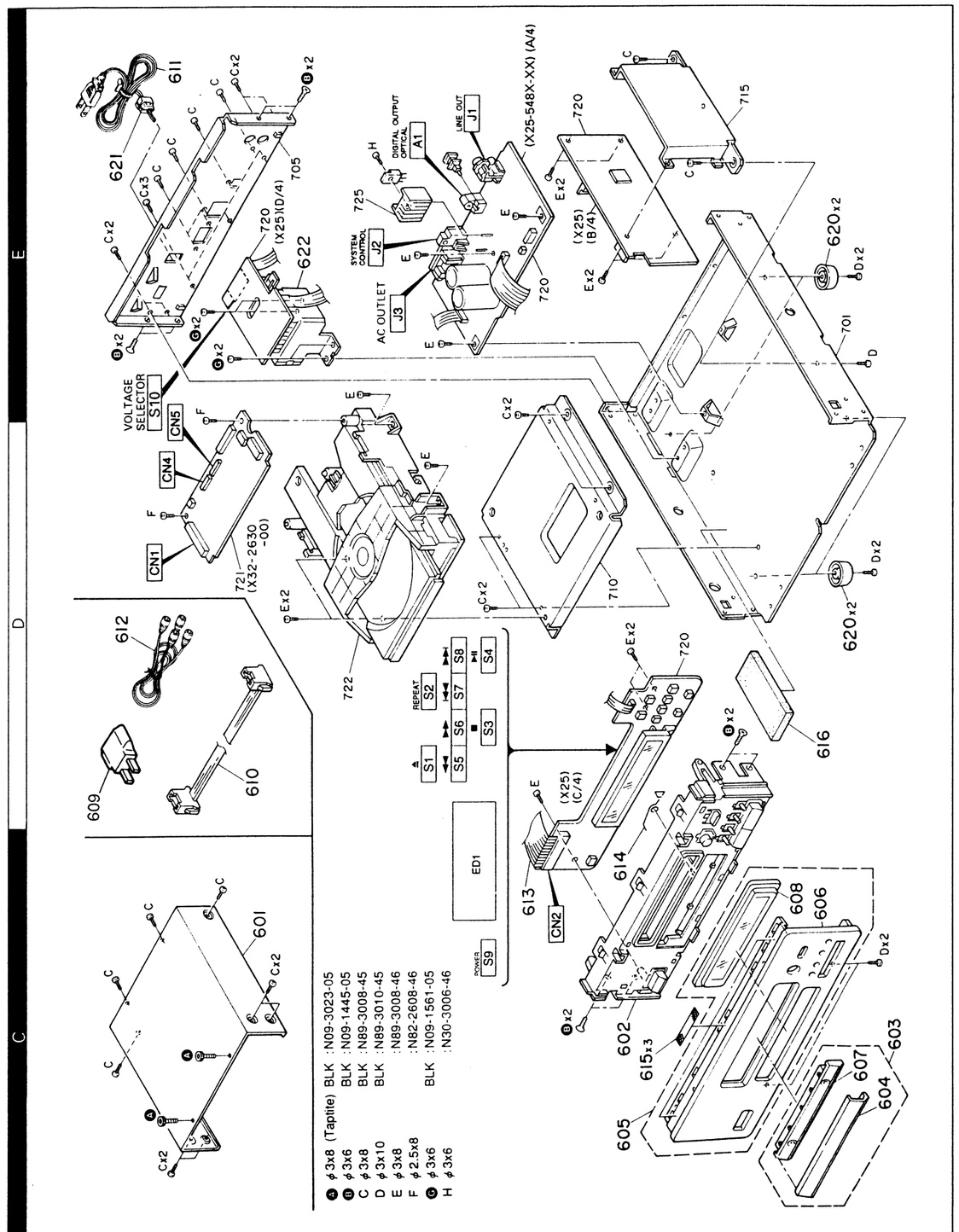
EXPLODED VIEW : MECHANISM



A	Ø 2.6 x 8	: N09-2769-05
B	Ø 2.6 x 10	: N09-2817-05
C	M2 x 6	: N09-2543-05
D	M2 x 2.5	: N39-2025-46
E	Ø 2.6 x Ø 4.7 x t0.5	: N19-0891-04
F	Ø 2.6 x 8 (Bi-Tap)	: N82-2608-46
G	Ø 2 x 8 (Bi-Tap)	: N89-2008-46

Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW : UNIT



A	φ3x8 (Taptite)	BLK	: N09-3023-05
B	φ3x6	BLK	: N09-1445-05
C	φ3x8	BLK	: N89-3008-45
D	φ3x10	BLK	: N89-3010-45
E	φ3x8	BLK	: N89-3008-46
F	φ2.5x8		: N82-2608-46
G	φ3x6	BLK	: N09-1561-05
H	φ3x6		: N30-3006-46

Parts with the exploded numbers larger than 700 are not supplied.

× New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

❶

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
			DP-1001			
601	1C	*	A01-3064-01	METALLIC CABINET		
602	2C	*	A22-1652-21	SUB PANEL		
603	2C	*	A29-0357-03	PANEL ASSY(TRAY)		
604	2C	*	A29-0358-03	PANEL(TRAY)		
605	2C	*	A60-0456-12	PANEL ASSY(FRONT)		
606	2C	*	A60-0457-12	PANEL(FRONT)		
607	2C	*	B07-2251-03	ESCUTCHEON		
608	2C	*	B10-1985-03	FRONT GLASS		
-			B46-0310-03	WARRANTY CARD	TE	
-		*	B60-1324-00	INSTRUCTION MANUAL(ENGLISH)		
-		*	B60-1325-00	INSTRUCTION MANUAL(F,G,D,I)	E	
-		*	B60-1326-00	INSTRUCTION MANUAL(CHINESE)	M	
-		*	B60-1327-00	INSTRUCTION MANUAL(SPANISH)	ME	
⚠ 609	1D		E03-0115-05	AC PLUG ADAPTER	M	
610	1D		E30-2628-05	CORD WITH CONNECTOR		
⚠ 611	1E		E30-2592-15	AC POWER CORD	ME	
⚠ 611	1E		E30-2602-05	AC POWER CORD	T	
612	1D	*	E30-2749-05	AUDIO CORD		
613	2C		E35-0384-05	FLAT CABLE(29P)		
614	2C	*	G09-0631-04	SPRING		
615	2C		G10-0173-04	NON-WOVEN FABRIC		
616	2D	*	G11-2171-14	SOFT TAPE		
-		*	H10-5554-02	POLYSTYRENE FOAMED FIXTURE(L)		
-		*	H10-5555-02	POLYSTYRENE FOAMED FIXTURE(R)		
-		*	H12-2171-04	PACKING FIXTURE	T	
-			H20-0577-04	PROTECTION COVER	M	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	ME	
-			H25-0397-04	PROTECTION BAG	E	
-			H25-0651-04	PROTECTION BAG (0232 PRINTED)	T	
-			H25-0659-04	PROTECTION BAG (0397 PRINTED)	T	
-		*	H50-0733-04	ITEM CARTON CASE	ME	
-		*	H50-0856-04	ITEM CARTON CASE	T	
620	2D,2E		J02-0127-05	FOOT		
⚠ 621	1E		J42-0083-05	POWER CORD BUSHING		
⚠ 622	1E		L07-0173-05	POWER TRANSFORMER	TE	
⚠ 622	1E		L07-0174-05	POWER TRANSFORMER	M	
A		*	N09-3023-05	MACHINE SCREW (3 X 8)		
B			N09-1445-05	SET SCREW (M3X8)		
C			N89-3008-45	BINDING HEAD TAPTITE SCREW		
D			N89-3010-45	BINDING HEAD TAPTITE SCREW		
E			N89-3008-46	BINDING HEAD TAPTITE SCREW		
F			N82-2608-46	BINDING HEAD TAPTITE SCREW		
G			N09-1561-05	TAPTITE SCREW (3X6,+-)		
			ELECTRIC UNIT (X25-4840-10)			
S1	3B		S33-2062-05	LEVER SWITCH(OPEN/CLOSE)		
			OPERATION UNIT (X25-548X-XX)			
C1			CE04KW1C101M	ELECTRO 100UF 16WV		
C2			CE04KW1C330M	ELECTRO 33UF 16WV		
C3			C90-1826-05	BACKUP 0.047F 5.5WV		

L:Scandinavia **K**:USA **P**:Canada
Y:PX(Far East, Hawaii) **T**:England **E**:Europe
Y:AAFES(Europe) **X**:Australia **M**:Other Areas

⚠ indicates safety critical components

× New Parts
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Teile ohne **Parts No.** werden nicht geliefert.

❷

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
C4			CE04KW1H470M	ELECTRO 47UF 50WV		
C5			CF92FV1H103J	MF 0.010UF J		
C6			CE04KW1H100M	ELECTRO 10UF 50WV		
C7 ,8		*	C90-3508-05	ELECTRO 3300UF 16WV		
C9			CE04KW1C101M	ELECTRO 100UF 16WV		
C10			CF92FV1H103J	MF 0.010UF J		
C11 ,12			CE04KW1A221M	ELECTRO 220UF 10WV		
C13			CC45FSL1H101J	CERAMIC 100PF J		
C14			CE04KW1A101M	ELECTRO 100UF 10WV		
C15			CF92FV1H103J	MF 0.010UF J		
C16 ,17			CC45FSL1H221J	CERAMIC 220PF J		
C18			CK45FF1H103Z	CERAMIC 0.010UF Z		
C19 ,20			CF92FV1H102J	MF 1000PF J		
C21 ,22			CF92FV1H124J	MF 0.12UF J		
C23 ,24			CE04KW1C330M	ELECTRO 33UF 16WV		
C25 ,26			CF92FV1H471J	MF 470PF J		
C27			CF92FV1H103J	MF 0.010UF J		
C28			CE04KW1C100M	ELECTRO 10UF 16WV		
C29 ,30			CF92FV1H103J	MF 0.010UF J		
C31			CK45FF1H103Z	CERAMIC 0.010UF Z		
⚠ C32			C91-1439-05	FILM 0.01UF 250VAC		
C33 -37			CK45FF1H103Z	CERAMIC 0.010UF Z		
C38			C91-0769-05	CERAMIC 0.01UF K		
C39 ,40			CF92FV1H103J	MF 0.010UF J		
C41 ,42			CE04KW1A221M	ELECTRO 220UF 10WV		
C43 -45			CK45FF1H103Z	CERAMIC 0.010UF Z		
C46			CF92FV1H103J	MF 0.010UF J		
C50			CF92FV1H104J	MF 0.10UF J		
C51			CK45FF1H103Z	CERAMIC 0.010UF Z		
C52			CF92FV1H103J	MF 0.010UF J		
C53			C91-1469-05	FILM 39PF K		
C54			CF92FV1H474J	MF 0.47UF J		
C55			CE04KW1A221M	ELECTRO 220UF 10WV		
C56			CF92FV1H103J	MF 0.010UF J		
C57			CF92FV1H102J	MF 1000PF J		
C58			C91-1466-05	FILM 22PF K		
C59			C91-1474-05	FILM 100PF J		
C60			CF92FV1H103J	MF 0.010UF J		
C61			CE04KW1A221M	ELECTRO 220UF 10WV		
C62			CF92FV1H474J	MF 0.47UF J		
C63			C91-1466-05	FILM 22PF K		
C64			CE04KW1C330M	ELECTRO 33UF 16WV		
C65			CF92FV1H103J	MF 0.010UF J		
C66			CE04KW1C220M	ELECTRO 22UF 16WV		
C67			CF92FV1H103J	MF 0.010UF J		
C68 ,69			CE04KW1A221M	ELECTRO 220UF 10WV		
C70			CF92FV1H104J	MF 0.10UF J		
C71			CF92FV1H102J	MF 1000PF J		
C72 ,73			CF92FV1H105J	MF 1.0UF J		
C74 -79			CF92FV1H104J	MF 0.10UF J		
C80 ,81			CE04KW1A221M	ELECTRO 220UF 10WV		
C82 ,83			CF92FV1H821J	MF 820PF J		
C84 -87			CF92FV1H331K	MF 330PF K		
C88 ,89			CF92FV1H121K	MF 120PF K		
C90 ,91			CF92FV1H103J	MF 0.010UF J		

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❸

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C92 ,93			CE04KW1A221M	ELECTRO 220UF 10WV		
C94 ,95			CF92FV1H121K	MF 120PF K		
C96 -98			CF92FV1H103J	MF 0.010UF J		
C99			CF92FV1H124J	MF 0.12UF J		
CN2	2C		E40-4209-05	FLAT CABLE CONNECTOR(29P)		
J1	1E	*	E63-0099-05	PHONO JACK(LINE OUT)		
J2	1E		E08-0312-05	RECTANGULAR RECEPTACLE(S.CONT)		
⚠ J3	1E		E03-0108-05	AC OUTLET	ME	
⚠ J3	1E		E03-0109-05	AC OUTLET	T	
J8			J11-0098-05	WIRE CLAMPER		
L1 ,2			L39-0085-05	PHASE COMPENSATION COIL		
L3			L40-1011-17	SMALL FIXED INDUCTOR(100UH,K)		
L4			L40-2291-17	SMALL FIXED INDUCTOR(2.2UH)		
L5 -7			L92-0018-05	FERRITE CORE		
X1			L77-1164-05	CRYSTAL RESONATOR(16.9344MHz)		
H			N30-3006-46	PAN HEAD MACHINE SCREW		
R17 ,18			RN14BK2C2201F	RN 2.20K F 1/6W		
R19 ,20			RN14BK2C1101F	RN 1.10K F 1/6W		
R21 ,22			RN14BK2C2201F	RN 2.20K F 1/6W		
R53 -56			RN14BK2C2371F	RN 2.37K F 1/6W		
R100			RN14BK2C2701F	RN 2.70K F 1/6W		
R106			RN14BK2C2200F	RN 220.0 F 1/6W		
R109			RN14BK2C1001F	RN 1.00K F 1/6W		
R110			RN14BK2C2002F	RN 20.0K F 1/6W		
R112			RD14NB2E150J	RD 15 J 1/4W		
R114,115			RN14BK2C1001F	RN 1.00K F 1/6W		
R116			RN14BK2C1002F	RN 10.0K F 1/6W		
R117			RN14BK2C1102F	RN 11.0K F 1/6W		
R118,119			RN14BK2C2701F	RN 2.70K F 1/6W		
R120,121			RD14NB2E150J	RD 15 J 1/4W		
R122,123			RN14BK2C1501F	RN 1.50K F 1/6W		
R124-127			RN14BK2C3301F	RN 3.30K F 1/6W		
R128,129			RN14BK2C5600F	RN 560.0 F 1/6W		
R130-133			RN14BK2C1302F	RN 13.0K F 1/6W		
R134-137			RN14BK2C1002F	RN 10.0K F 1/6W		
R138-143			RN14BK2C1102F	RN 11.0K F 1/6W		
R144			RN14BK2C7501F	RN 7.50K F 1/6W		
K1			S51-2089-05	MAGNETIC RELAY(LINE OUT)		
S1 -9	1C,1D		S40-1064-05	TACT SWITCH		
⚠ S10	1E		S62-0001-05	SLIDE SWITCH(VOLTAGE SELECTOR)	M	
⚠ D1			S5688B	DIODE		
⚠ D1			1SR139-100	DIODE		
D2			HZS5.6N(B)	ZENER DIODE		
D2			RD5.6ES(B)	ZENER DIODE		
D3			S5688B	DIODE		
D3			1SR139-100	DIODE		
D4			HSS104	DIODE		
D4			1SS133	DIODE		
D5 -8			HSS104A	DIODE		
D5 -8			1SS131	DIODE		
D9			HSS104	DIODE		
D9			1SS133	DIODE		

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❹

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⚠ D10 -14			S5688B	DIODE		
⚠ D10 -14			1SR139-100	DIODE		
D15			HZS6.8N(B2)	ZENER DIODE		
D15			RD6.8ES(B2)	ZENER DIODE		
D16			HZS30N(B)	ZENER DIODE		
D16			RD30ES(B)	ZENER DIODE		
D17			HZS6.8N(B2)	ZENER DIODE		
D17			RD6.8ES(B2)	ZENER DIODE		
D18 -25			HSS104	DIODE		
D18 -25			1SS133	DIODE		
D26			HSS104A	DIODE		
D26			1SS131	DIODE		
D27			HZS6.8N(B2)	ZENER DIODE		
D27			RD6.8ES(B2)	ZENER DIODE		
D29 ,30			HZS6.8N(B2)	ZENER DIODE		
D29 ,30			RD6.8ES(B2)	ZENER DIODE		
D31 -34			HSS104	DIODE		
D31 -34			1SS133	DIODE		
D35			HZS5.1S(B2)	ZENER DIODE		
D35			RD5.1JS(B2)	ZENER DIODE		
D37			HZS5.1S(B2)	ZENER DIODE		
D37			RD5.1JS(B2)	ZENER DIODE		
ED1	1C		10-BT-67GSK	INDICATOR TUBE		
IC1			NJM4565D-D	IC(OP AMP X2)		
IC2			NJM4558L-D	IC(OP AMP X2)		
IC3			TC74HC74AP	IC(DUAL D-TYPE FLIP FLOP)		
IC4			TC74HCU04AP	IC(CMOS INVERTER)		
IC5			SM5840CP	IC(DIGITAL FILTER)		
IC6			SAA7350	IC(DAC)		
IC7			TDA1547	IC(DAC)		
IC8			NJM4565D-D	IC(OP AMP X2)		
IC9			NJM4558L-D	IC(OP AMP X2)		
⚠ Q1			2SA954(L,K)	TRANSISTOR		
Q2			2SA1048(Y,GR)	TRANSISTOR		
Q2			2SA1309A(Q,R)	TRANSISTOR		
⚠ Q3 ,4			2SD1944	TRANSISTOR		
Q5			DTC124ES	DIGITAL TRANSISTOR		
Q5			UN4212	DIGITAL TRANSISTOR		
Q6 ,7			2SD1944	TRANSISTOR		
Q8			2SK246(Y,GR)	FET		
Q9 ,10			2SB1375	TRANSISTOR		
Q11 ,12			2SD2012	TRANSISTOR		
Q13			2SB1375	TRANSISTOR		
Q14			2SB1370	TRANSISTOR		
Q14			2SB1548	TRANSISTOR		
Q15 ,16			2SK161(GR)	FET		
Q17			2SC2003(L,K)	TRANSISTOR		
Q18			2SD1944	TRANSISTOR		
A1	1E		W02-1114-05	OSCILLATING MODULE(D.OUT)		
			CD PLAYER UNIT (X32-2630-00)			
C1 -4			CK73FB1H103K	CHIP C 0.010UF K		
C5 ,6			C90-3215-05	ELECTRO 220UF 6.3WV		
C7			CK73FB1H103K	CHIP C 0.010UF K		
C31			CK73FB1E104K	CHIP C 0.10UF K		

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PARTS LIST

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IC6			CXD2500BQ	IC(DIGITAL SIGNAL PROCESSOR)		
IC9			S-80740AL-A4	IC(VOLTAGE DETECTOR)		
IC11			M5237ML	IC(VOLTAGE REGULATOR)		
Q1			UTC124EK	DIGITAL TRANSISTOR		
Q2			2SB1308(Q,R)	TRANSISTOR		
			MECHANISM ASS'Y (X92-1709-71)			
1	3B		A10-2947-01	CHASSIS (MAIN)		
2	2B		A11-0735-03	SUB CHASSIS (FRAME)		
3	1A		A11-0737-02	SUB CHASSIS (CLAMPER)		
11	1B		D10-2325-04	ROD		
12	2B		D10-3253-03	SLIDER (INTERMEDIATE)		
13	3A		D13-0975-04	GEAR (CENTER)		
14	3A		D13-0976-03	GEAR (CARRIER)		
15	3A		D13-0977-03	GEAR (IDLER)		
16	3A		D13-0978-03	GEAR (MAIN)		
17	2A		D13-0979-03	GEAR (GEAR)		
18	2A		D13-0980-02	LACK (MOTOR)		
19	2B		D13-0997-05	GEAR (INTERMEDIATE)		
20	1B		D13-0998-05	GEAR (FEED)		
21	1B		D13-0999-05	MOTOR PULLEY		
25	3B		D15-0328-04	PULLEY		
26	3A		D15-0329-03	BELT		
27	3B		D16-0329-04			
30	1B		E35-0296-05	FLAT CABLE(12P)		
31	2B		E35-0420-05	LEAD WIRE		
35	2B		G01-3464-04	COMPRESSION SPRING		
-			G10-0173-04	NON-WOVEN FABRIC		
40	1B,2B		J02-1058-15	INSULATOR		
41	1A		J11-0180-03	CLAMPER		
42	2A		J99-0513-01	TRAY		
A			N09-2769-05	MACHINE SCREW (2.6X10,12P)		
B			N09-2817-05	TAPTITE SCREW (MACHINE SCREW)		
C			N09-2543-05	SEMS(MACHIN SCREW)		
D			N39-2025-46	PAN HEAD MACHIN SCREW		
E			N19-0891-04	FLAT WASHER		
F			N82-2608-46	BINDING HEAD TAPTITE SCREW		
G			N89-2008-46	BINDING HEAD TAPTITE SCREW		
S2	2B		S33-1022-05	LEVER SWITCH (SLT)		
55	1A		T50-1058-04	YOKE		
56	1A		T99-0503-15	MAGNET		
DM	1B		A11-0679-18	SUB CHASSIS ASSY(DISC MOTOR)		
FM	2B		T42-0566-05	DC MOTOR (FEED MOTOR)		
LM	3B		T42-0609-05	DC MOTOR (LOADING MOTOR)		
PU	1B		T25-0013-05	OPTICAL PICKUP HEAD(KSS-240A)		

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C32 ,33			CC73FSL1H101J	CHIP C 100PF J		
C34			CK73FB1H332K	CHIP C 3300PF K		
C35			CC73FSL1H101J	CHIP C 100PF J		
C37 ,38			C90-3211-05	ELECTRO 33UF 6.3WV		
C39			C90-3253-05	ELECTRO 1UF 50WV		
C40			CK73FB1E104K	CHIP C 0.10UF K		
C41			CC73FSL1H470J	CHIP C 47PF J		
C42			CK73FB1H332K	CHIP C 3300PF K		
C43			CK73FB1H222K	CHIP C 2200PF K		
C44			CK73FB1H103K	CHIP C 0.010UF K		
C45			CK73FB1E104K	CHIP C 0.10UF K		
C46			CK73FB1E563K	CHIP C 0.056UF K		
C47			C90-3251-05	ELECTRO 0.47UF 50WV		
C48			CK73FB1H103K	CHIP C 0.010UF K		
C49			CK73FB1E104K	CHIP C 0.10UF K		
C50			CK73FB1H561K	CHIP C 560PF K		
C51 ,52			CK73FB1H333K	CHIP C 0.033UF K		
C53			C90-3209-05	ELECTRO 10UF 6.3WV		
C54			CK73FB1H222K	CHIP C 2200PF K		
C55			CK73FB1H152K	CHIP C 1500PF K		
C56			CC73FSL1H820J	CHIP C 82PF J		
C57			C90-3471-05	NP-ELECT 1UF 50WV		
C59			C90-3227-05	ELECTRO 33UF 16WV		
C60			C90-3210-05	ELECTRO 22UF 6.3WV		
C61 ,62			CK73FB1H103K	CHIP C 0.010UF K		
C63			CK73FB1E104K	CHIP C 0.10UF K		
C64			CK73FB1H223K	CHIP C 0.022UF K		
C65			CK73FB1H332K	CHIP C 3300PF K		
C66			C90-3471-05	NP-ELECT 1UF 50WV		
C67			C90-3450-05	NP-ELECT 22UF 6.3WV		
C68 ,69			CK73FB1H103K	CHIP C 0.010UF K		
C70			C90-3471-05	NP-ELECT 1UF 50WV		
C101			CK73FB1H473K	CHIP C 0.047UF K		
C102			CK73FB1H152K	CHIP C 1500PF K		
C104-106			CC73FSL1H470J	CHIP C 47PF J		
C109			CK73FB1H221K	CHIP C 220PF K		
C122			C90-3215-05	ELECTRO 220UF 6.3WV		
C131			CK73FB1H333K	CHIP C 0.033UF K		
C132			C90-3253-05	ELECTRO 1UF 50WV		
CN1	1D		E40-4209-05	FLAT CABLE CONNECTOR(29P)		
CN4	1D		E40-4631-05	FLAT CABLE CONNECTOR(12P)		
CN5	1D		E40-3011-05	PIN ASSY(ADJUSTMENT)		
VR1 ,2			R12-3686-05	TRIMMING POT.(22K)<TE,FE GAIN>		
D1 -5			MA110	DIODE		
D6			DTZ5.1(B)	ZENER DIODE		
D6			MA8051-M	ZENER DIODE		
D7			MA110	DIODE		
D15			MA110	DIODE		
IC1			SC75216AGF-696	IC(4 bit MICROPROCESSOR)		
IC1			UPD75216AGF-695	IC(4 bit MICROPROCESSOR)		
IC2			TA8409F	IC(MOTOR DRIVER)		
IC3			CXA1372Q	IC(CD RF SERVO)		
IC4 ,5			TA8406F	IC(OP AMP X2)		

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DP-1001

SPECIFICATIONS

Format

System ..... Compact disc digital audio system
Laser ..... Semiconductor laser
Playing rotation ..... 200rpm~500rpm (CLV)

D/A convertors

D/A conversion 1Bit
Oversampling 8fs (352.8kHz)

Audio

Frequency response ..... 4Hz~20kHz
Signal to noise ratio ..... More than 105dB
Dynamic range ..... More than 99dB
Total harmonic distortion
..... Less than 0.001% (at 1kHz)
Channel separation ..... More than 94dB (at 1kHz)
Wow & flutter
..... Unmeasurable limit (±0.001% W.PEAK)
Output level/impedance
Fixed 2.0V/1Ω
Digital output (optical)
..... -15dBm~-21dBm (Wave length 660nm)

General

Power consumption 12W
Dimensions ..... W: 270mm
H : 98mm
D : 316mm
Weight (Net) 4.6kg

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Note :
Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the General Market (M) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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